

CLAIMS

1. Electrical drive system for a vehicle with a skid steering element with at least a

- left and a homogeneous right electrical drive engine (2, 4),
- an electrical energy source (6),
- an electrical control unit (8) for the independent increase of numbers of revolutions at the left and right drive engine (2, 4),
- a left gear unit (16), connected with a left drive wheel or a left track of a left drive unit (22, 28), a left drive engine (2) connected with a first left transfer element (26) and a second left transfer element (24),
- a homogeneous right gear unit (18), connected with a right drive wheel or a right track (34, 40), covered a first right transfer element (38) connected with the right drive engine (4) and a second right transfer element (36),

characterized in that first left transfer element (26) by a first mechanical gear train (44, 50; 48, 52; 46) is connected directly with the second right transfer element (36), and that the first right transfer element (38) is connected directly with the second left transfer element (24) by a second mechanical gear train (54, 60; 58, 62; 56).

2. A drive system according to claim 1, characterized in that each gear unit (16, 18) is designed as planetary gears with several planetary gears (20, 32), those swiveling on a planet pinion cage (22, 34) and in synchronous operation with a sun gear (24, 36) and an internal gear (26, 38), whereby in each case the planet pinion cage (22, 34) of the drive unit, the internal gear (26, 38) of the first transfer element and the sun gear (24, 36) form the second transfer element.

3. A drive system according to claim 2, characterized in that the first mechanical gear train is formed by a torque-proof first spur gear (44), connected with the internal gear (26) of the left gear unit (16), a torque-proof second spur gear (46) and a first connecting shaft (48) connected with the sun gear (36) of the right gear unit (18), which exhibits at its ends a third and a fourth spur gear, whereby the third (50, 52) with the first (44) and the fourth (52) with the second

(46) spur gear stand in interference, and that the second mechanical gear train is formed by a torque-proof fifth spur gear (54) connected with the internal gear (38) of the right gear unit (18), connecting the sixth spur gear (56) and a second connecting shaft (58) with the sun gear (24) of the left gear unit (16), which at its ends exhibits one seventh (60) and an eighth (62) spur gear, whereby the seventh (60) with the fifth (54) and the eighth (62) with the sixth (56) stand in interference.

4. A drive system according to claims 1 to 3, characterized in that between the left and the right electrical drive engine (2, 4) electrical middle enclosures (8, 12, 14) are intended, which, at least in certain operating conditions, electrical performance of the left drive engine (2) working as generator leads to the right drive engine (4) working as engine and in reverse.

5. Gear units (16, 18) built for an electrical drive system according to the preceding claims.